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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/697,532

Filing Date: October 30, 2003

Appellant(s): CHEN ET AL.

Luke A. Kilyk
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 23 August 2006
appealing from the Office action mailed 23 September 2005.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

The examiner notes that the description of independent claim 1 is given at the bottom half of page 9 of the brief; the description of dependent method claim 18 (which is the broadest of the method claims which are argued separately under a separate heading) is given at the bottom half of page 12 of the brief; the description of independent claim 30 is given in the middle of page 14; and the description of independent claim 39 is given at the bottom of page 14 of the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,465,046	Hansson et al.	10-2002
1,947,459	Casto	2-1934
6,617,009	Chen et al.	9-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansson et al. (U.S. 6,465,046 B1) in view of Casto (U.S. 1,947,459).

Hansson et al. teaches the formation of a floor covering by optionally coating a core of wood or other material with an acrylic layer, then printing a digital pattern on the layer, then coating a wear coating which may be a multi-layer structure and contain nano-particles to enhance wear, followed by embossing of the layers in registration with the printing (col.3, lines 35-55, col.4, lines 10-30, col.4, line 65-col.5, line 40, col.6, lines 5-25). Casto teaches forming a wood grain pattern on a surfacing material by embossing the core first then putting pigment into the embossed areas in order to create a realistic design, the core may be coated and the coating embossed and the embossments filled with pigment to get multicolor effects (page 2, lines 5-150). The instant invention claims embossing a core, or a coating layer on a core with a design, and then printing in registration with the design by a

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digital printer with a high resolution. It would have been obvious to one of ordinary skill in the art to have formed embossments in the core or coating layers of Hansson et al. then printing in registration with digital means in order to make a better simulation of wood grain and other natural patterns because of the teachings of Casto.

B. Claims 1-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,617,009 in view of Hansson et al. (U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '009 patent claims a print layer with a cover layer on a core. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view of the '009 claims as modified by the secondary references in order to provide a better simulation. As the instant application is latter filed only a one way showing is needed.

C. Claims 1-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being

unpatentable over claims 7-21, 31-33, 37-40 and 42-54 of copending Application No. 09/630,121 in view of Hansson et al. (U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '121 application claims printing on a core with a cover layer. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view of the '121 claims as modified by the secondary references in order to provide a better simulation. As the instant application is latter filed only a one way showing is needed.

This is a provisional obviousness-type double patenting rejection.

D. Claims 1-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 45-73 of copending Application No. 10/909,684 in view of Hansson et al. (U.S. 6,465,046 B1) and Casto (U.S. 1,947,459).

The '684 application claims a print layer on a core with a cover layer. The secondary references teach embossing and digital printing of a wood grain layer to have a better simulation. The instant claims would have been obvious in view

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of the '684 claims as modified by the secondary references in order to provide a better simulation. As the claims of the '684 application could have been earlier presented in the parent application only a one way showing is needed.

This is a provisional obviousness-type double patenting rejection.

(10) Response to Argument

A. Response to Appellant's Arguments Regarding the 103 rejection of Hansson et al. in view of Casto of instant claims 1-17 and 31-38, starting on page 19 of the Brief filed 23 August 2006.

Appellant argues that there is no teaching in either Hansson or Casto of printing in registration with a surface that is already textured. The examiner disagrees in that Casto is relied upon for this limitation. Appellant argues that Casto merely teaches formation of a texture in a substrate layer and coating this layer, then removal of the colored coating material from all areas except the areas of the indentation to form a smooth surface, and that this in no way can be considered to be a type of printing. Appellant argues that the decorative

pattern is only produced by the depth of the pigmented material in the indentations. As a first point the examiner notes that nothing in the instant independent claim language would preclude an outer protective coat that is smooth with texture in the base and/or first coat layer on the base. Hansson et al. does teach an outer protective layer that is embossed, but does this so that the difference in feature depth will interact with the digital printing to create a more realistic appearance. The three dimensional depth of the pigment layer in Casto performs this function by creating both a depth and a color effect even though the outer protective layer of Casto does not have to be textured. Thus the product of Hansson et al. in view of Casto does not destroy the benefits of the teachings of Hansson as a three dimensional enhanced color pattern effect is present in the product of the combination.

As the color of Casto is in registration with the indentations of Casto, which form the color pattern of Casto, appellant's argument that there is no teaching of printing in registration with texture is simply incorrect. Appellant also argues that all of the printing terms such as half tones, refer to the texturing of the relief plate that is used to emboss the texture in the surface covering panel. Appellant neglects the

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fact that all of the features are transferred to the surface that is embossed in a reverse pattern (depressions become elevations). Thus the surface covering panel of Casto can be said to have features of printing such as half tones.

Though the examiner has never formally constructed the word "printing", it's common meaning is well known and appellant has not given a specific definition in the specification that would contradict the common understanding of printing. A cursory examination of the examiner's desk dictionary gives at least six definitions of printing that all involve some form of texture by pressing or color pattern formation or both in combination, which is what Casto teaches. Appellant's argument that there is no teaching of printing and printing in registration with texture in Casto is not correct.

Applying the teachings of Casto to Hansson et al. is also enabled by the ordinary level of skill in the art as evidenced by Hansson et al. Hansson et al. in column 10, lines 1-10, teaches that embossing or engraving of the coating on the substrate is done with digital control so that it matches the décor printing. This is an explicit teaching of registration of engraving with printing on a printed layer. It would well be within the ordinary skill in the art to reverse the order of the

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steps of digital pigment placement by inkjet, and surface texturing with digital control given in Hannson et al., when supplied with the motivation of filling indentations with pigment in order to form a depth effect in Casto.

B. Response to Appellant's Arguments Regarding the 103 rejection of Hansson et al. in view of Casto of instant claims 18-29, starting on page 28 of the Brief filed 23 August 2006.

Appellant repeats the arguments addressed in the above section that Casto does not teach printing. The examiner relies on the answers given above.

C. Response to Appellant's Arguments Regarding the 103 rejection of Hansson et al. in view of Casto of instant claim 30, starting on page 30 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

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D. Response to Appellant's Arguments Regarding the 103 rejection of Hansson et al. in view of Casto of instant claim 39, starting on page 31 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

E. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 1-17 and 31-38 over claims 1-39 of U.S. Patent 6,617,009 in view of Hansson et al. in view of Casto, starting on page 32 of the Brief filed 23 August 2006.

Appellant argues that there is no motivation to apply the teachings of Hansson et al. and Casto to the claims of the '009 patent and that, even if they were applied, they do not teach printing in registration with an applied texture. The claims of the '009 patent are drawn to a print layer on top of a substrate with some of the claims calling for a protective layer on top of the print layer. The combination of Hansson et al. in view of Casto teaches enhancement of printing on a substrate by the use of texture in registration with that printing. It would thus

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have been obvious to have applied the teachings of the reference to the '009 patent. Appellant's arguments regarding Hansson et al. and Casto not teaching the claimed limitations have been addressed above.

F. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 18-29 over claims 1-39 of U.S. Patent 6,617,009 in view of Hansson et al. in view of Casto, starting on page 33 of the Brief filed 23 August 2006.

Appellant again argues that Casto does not teach printing onto a textured surface. The examiner relies upon the previous answers given above.

G. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 30 over claims 1-39 of U.S. Patent 6,617,009 in view of Hansson et al. in view of Casto; starting on page 34 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

H. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 39 over claims 1-39 of U.S. Patent 6,617,009 in view of Hansson et al. in view of Casto, starting on page 34 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

I. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 1-17 and 31-38 over claims 7-21, 31-33, 37-40 and 42-54 of application Serial No. 09/630,121 in view of Hansson et al. in view of Casto, starting on page 35 of the Brief filed 23 August 2006.

Appellant argues that there is no motivation to apply the teachings of Hansson et al. and Casto to the claims of the '121 application and that even if they were applied they do not teach printing in registration with an applied texture. The claims of the '121 application are drawn to a print layer on top of a substrate with some of the claims calling for a protective layer on top of the print layer. The combination of Hansson et al. in

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view of Casto teaches enhancement of printing on a substrate by the use of texture in registration with that printing. It would thus have been obvious to have applied the teachings of the reference to the '121 application claims. Appellant's arguments regarding Hansson et al. and Casto not teaching the claimed limitations have been addressed above.

J. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 18-29 over claims 7-21, 31-33, 37-40 and 42-54 of application Serial No. 09/630,121 in view of Hansson et al. in view of Casto, starting on page 36 of the Brief filed 23 August 2006.

Appellant again argues that Casto does not teach printing onto a textured surface. The examiner relies upon the previous answers given above.

K. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 30 over claims 7-21, 31-33, 37-40 and 42-54 of application Serial No. 09/630,121 in view of Hansson et al. in view of Casto, starting on page 36 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

L. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 39 over claims 7-21, 31-33, 37-40 and 42-54 of application Serial No. 09/630,121 in view of Hansson et al. in view of Casto, starting on page 37 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

M. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 1-17 and 31-38 over claims 45-73 of application Serial No. 10/909,684 in view of Hansson et al. in view of Casto, starting on page 38 of the Brief filed 23 August 2006.

Appellant argues that there is no motivation to apply the teachings of Hansson et al. and Casto to the claims of the '684

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application and that, even if they were applied, they do not teach printing in registration with an applied texture. The claims of the '684 application are drawn to a print layer on top of a substrate with some of the claims calling for a protective layer on top of the print layer. The combination of Hansson et al. in view of Casto teaches enhancement of printing on a substrate by the use of texture in registration with that printing. It would thus have been obvious to have applied the teachings of the reference to the '684 application claims. Appellant's arguments regarding Hansson et al. and Casto not teaching the claimed limitations have been addressed above.

N. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claims 18-29 over claims 45-73 of application Serial No. 10/909,684 in view of Hansson et al. in view of Casto, starting on page 38 of the Brief filed 23 August 2006.

Appellant again argues that Casto does not teach printing onto a textured surface. The examiner relies upon the previous answers given above.

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O. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 30 over claims 45-73 of application Serial No. 10/909,684 in view of Hansson et al. in view of Casto, starting on page 39 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

P. Response to Appellant's Arguments Regarding the Obviousness-type double patenting rejection of instant claim 39 over claims 45-73 of application Serial No. 10/909,684 in view of Hansson et al. in view of Casto, starting on page 39 of the Brief filed 23 August 2006.

Appellant argues that this claim should rise and fall with the arguments regarding independent claim 1. The examiner relies upon the answers above given to appellant's arguments regarding Casto not teaching printing.

(11) Related Proceeding(s) Appendix

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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